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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/671,348 | 09/29/2003 | Jiin-Huey Chem Lin | LINJ3050/EM | 7121 |
| 23364 | 7590 | 03/21/2006 | EXAMINER | |
| BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314 | | | SWIGER III, JAMES L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3733 | |

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,348

Applicant(s)

CHERN LIN ET AL.

Examiner

James L. Swiger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8 and 14-17 is/are rejected.
- 7) ☒ Claim(s) 7 and 9-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ..., may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1,3,5, 9-10 and 12-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5, 6, 10, 11-12, and 14-15 of copending Application No. 10/ 393,044. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the current application read on the claims listed in the parent application. Claims 1,2,5 and 6 of '044 claim the same method as the independent claim 1 of the current application including preparing a cement paste, disposing a pocked (for examination purposes, the balloon may be considered a pocket), injecting paste into the balloon, applying pressure to the paste, and allowing the paste to harden. Also, the two applications claim the same device that includes a syringe tube, a mounting mechanism, two sets of wire holders, a slidable blade, an annular groove and an elastic ring.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Osario et al. (US 6,726,691). Osario et al. disclose a method that is capable of reading on the method as claimed in the instant application. Osario et al. includes a method that involves preparing a cement paste (Col. 3, line 65, Col. 4. lines 1-5). Note that the cement would inherently be made from a powder mixture and a liquid, and even though the reference discloses a fluoroscopic agent in the mixture, it is still capable of being a 'cement paste.' Osario et al. further includes disposing a pocket (Col. 4, lines 41-52). The balloon is capable of being, and is considered a pocket, the material of which would inherently have pores, capable of transmitting a liquid. Osario et al. further disclose a hollow tube that extends into the balloon (pocket), that transmits an inflation medium, (e.g. a cement paste). (Col. 4, lines 40-62). Osario et al. disclose that the "hollow tube...extends through a balloon material" (Col. 4, lines 42-44), disclosing that the balloon/pocket is connected to an injection device. Because of the connection, pressure must be applied to move the cement paste through the device (may be considered a syringe) and the paste is therefore injected into the balloon (pocket). Also, in order for the cement to be able to move pressure must be applied. Also, for the cement to be able to move through the injection device the power/liquid ratio must be higher, or

increased to provide for significant fluidity for the cement to end up in the balloon/pocket. The cement would inherently harden in the spirit of the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osario et al. '691 in view of Hochschuler et al. (US Pub. 2002/0058947 A1). Osario et al. disclose the claimed invention except for a method including the opening of the pocket and separating the opened pocket from the hardened cement. Hochuler et al. disclose a device that provides a method that reads on opening and removing a pocket from the hardened cement area (Figs. 25-27), the method is capable of being operated outside of the bone cavity, and after separation would be capable of removal from the bone cavity (Par. 0077 to 0079). It would have been obvious to one having ordinary skill in the art at the time the invention was made to perform the method of Osario et al. including at least the opening of the pocket and the separation from the hardened cement in view of Hochschuler et al. to better treat the area of the bone cavity in spirit of the invention.

With regards to claims 5-6 and 8 the combination of Osario et al. and Hochschuler et al. disclose the claimed invention except for a pocket made specifically of a fiber cloth or a biodegradable polymer. It would have been obvious to one having

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ordinary skill in the art at the time the invention was made to incorporate a fiber or biodegradable cloth, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

With regards to claims 14 and 15 Osario et al. and Hochschuler et al. disclose the claimed invention except for a workable pressure range between 0.1 Mpa and 200 Mpa. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate said workable ranges, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Osario et al. and Hochschuler et al. as applied to claim 14 above, and further in view of Daniel et al. (US Pub 2002/0133148). The combination of Osario et al. and Hochschuler et al. disclose the claimed invention except for a pressure sensor placed in-situ. Daniel et al. disclose a pressure sensor (386) that is capable of determining the amount of pressure yielded by the cement paste when injected (par. 0164). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device and perform the method of Osario et al. having at least a pressure sensor in view of Daniel et al. to better monitor the invention in use.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osario et al. '691 in view of Liu et al. (US 6,726,691). Osario et al. disclose the claimed

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invention except for a calcium phosphate-based cement. Liu et al. disclose a resorbable bioactive calcium phosphate cement that provides an improved biocompatibility (Col. 2, lines (35-60)). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Osario et al. having at least a cement paste that is calcium phosphate-based in view of Liu et al. to allow for improved biocompatibility of the material in use.

Allowable Subject Matter

Claims 7, 9-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James L. Swiger whose telephone number is 571-272-5557. The examiner can normally be reached on Monday through Friday, 8:30am to 5pm.

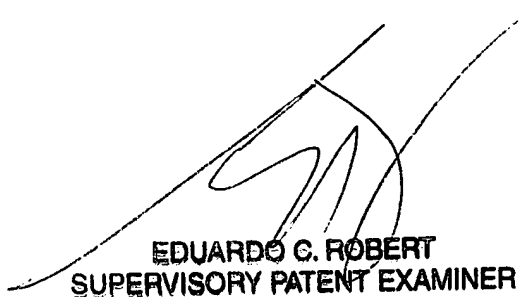
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 3/18/2006

JLS


EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER